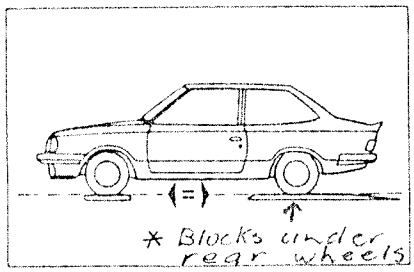
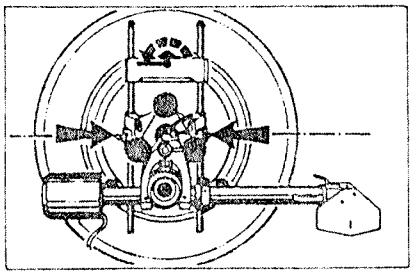
UNIFLEX

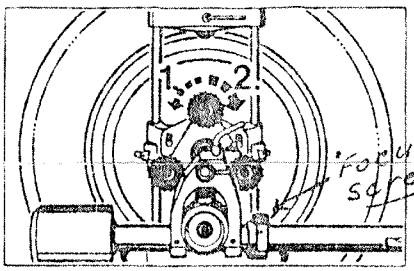
OPERATING INSTRUCTION



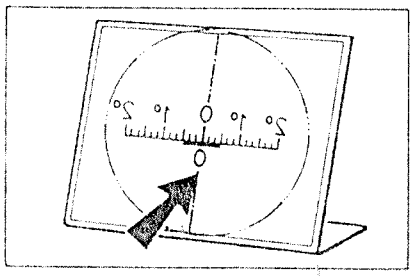
1. Check the air-pressure of the tyres. The vehicle to be checked should be in horizontal position, i.e. the front wheels and the rear wheels should be on the same horizontal level,* when the front wheels rest on the turntables.



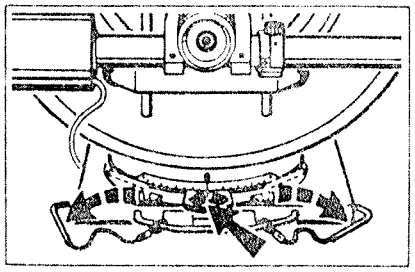
2. Mount the measuring units on the front wheels with the balance shaft on level with the centre of the wheel.



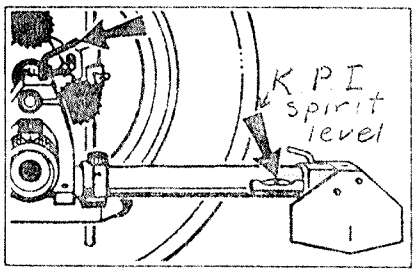
3. Jack-up the wheel and turn the three adjusting screws until they just touch the plate. Then turn them one turn clockwise.



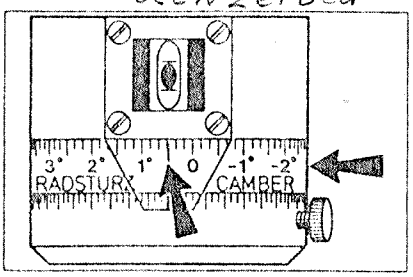
4. Place the control chart approx. 1,5 m in front of the wheel and focus the Toe-in/Toe-out scale on the chart. Rotate the wheel slowly and note the maximum and minimum deflections on the chart. Rotate the wheel until one of the extreme positions has been reached. Then turn the adjusting screw situated alone on one or the other side of the vertical line, going through the centre of the balance shaft of the measuring unit until the deflection has been halved. Repeat the procedure until the deflection has been eliminated and the run-out correction is now carried out.



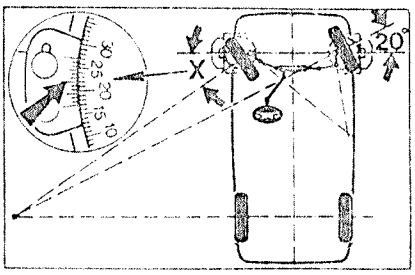
5. Remove the lock-pins from the turntables. Lower the wheels in straight ahead position, with the rods of the holding fixtures in vertical position, onto the turntables.
Move the vehicles up and down to settle the springs. Brake the wheels by the brake pedal depressor and zero-set the scales of the turntables.



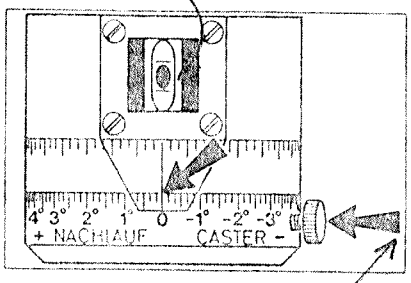
6. Lock the measuring unit in horizontal position after the KPI-spirit level. has been zeroed



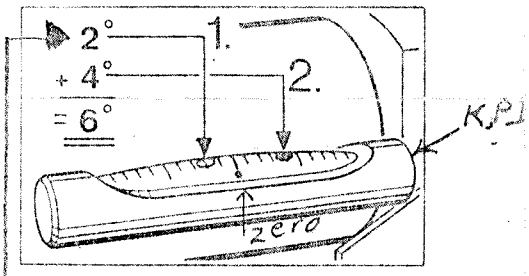
7. Turn the Camber-scale until the bubble is between the two lines of the measuring spirit level and read the Camber-value.



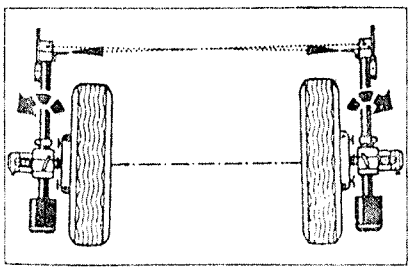
8. The Caster-, KPI- and Toe-out on Turns-values are measured in one operation. Turn the wheel 20° inwards. The bubbles of the measuring- and the KPI-spirit levels have now moved. Turn the Camber/Caster scale unit until the bubble of the measuring spirit level is between the two lines.



9. Loosen the Caster-scale-ring, zero-set the scale and fasten the ring anew.

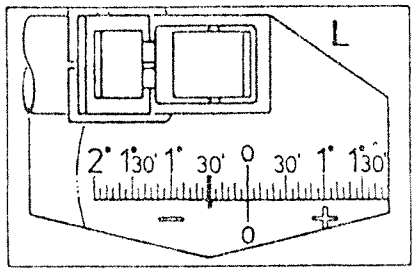


10. Note how many lines (one line=1°) the bubble of the KPI-spirit level has moved in relation to zero. Turn the wheel 20° outwards and the bubble of the measuring spirit level will move again. Then turn the scale unit until the bubble is between the lines and read the Caster-value. At the same time the bubble of the KPI-spirit level has moved to the other side of the zero-position. The total of the lines which the bubble has moved on either side of the zero position, is the KPI-value. Turn the other wheel 20° inwards and read the Toe-out on Turns on the degree-scale of the opposite turntable (see fig. 8).

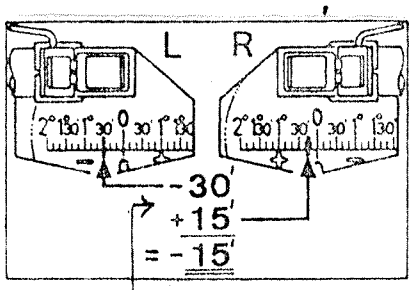


11. Turn the steering wheel into straight ahead position (133, VLC Steering Wheel Holder, extra accessory is recommended). Place both measuring units horizontally after the KPI-spirit-levels. For the compensation of possible play in bearings etc. apply a wheel spreader between the front wheels (the 131, VLC Wheel Spreader is available as extra accessories).

12. Focus the Toe-in/Toe-out scales on the chart of the opposite measuring unit.

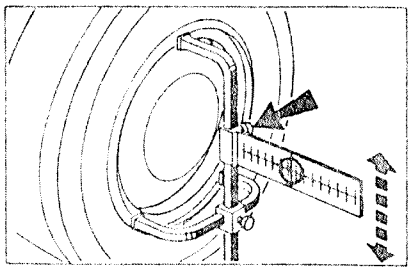


13. Read the Toe-in/Toe-out values.

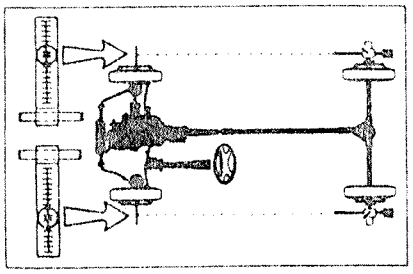


14. The total of the two values found as per point 13, is the total Toe-in/Toe-out value of the front wheels.

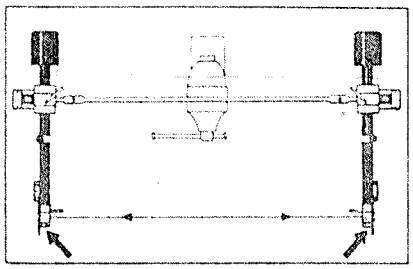
14a For the check of the rear axle mount the measuring units on the rear wheels and carry-out the correction for run-out as for the front wheels. Lower the rear wheels onto a set of roller plates or turntables. Move the vehicle up and down to settle the springs. When applying turntables, the lock pins should be removed before lowering the wheels. Read the total Toe-in/Toe-out value and the Camber-values of the rear wheels.



15. **Check the position of the rear wheels with the 145-100 Accessories.**
Mount the 145-100 assy on the front wheels.



16. Remove the mirror housings from the measuring tubes and focus the scales on the scale plates of the 145-100 assy. At correct position of the rear wheels in relation to the front wheels, both zero-lines of the scales should show the same value on the scale plates.



17. **Check of the measuring units**
The control bar - supplied with the aligner - is placed horizontally (use a spirit level) in a vice.
Mount the measuring units on the bar and fasten in horizontal position after the KPI-spirit levels. Focus the scales on the opposite chart and the zero lines of the scales should now cover the zero lines of the charts.
If necessary, adjust the mirrors by the screws of the mirror housings.

- a VLC product from LØWENER